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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,237	10/23/2003	Charles E. Kelly	MIC-49 (P50-0122)	8378

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EXAMINER	
A, MINH D	

ART UNIT	PAPER NUMBER
2821	

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/692,237	KELLY ET AL.	
	Examiner	Art Unit	
	Minh D. A	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3-5,7,9,10,19-21,25-35,38-49 and 52-68* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *3-5, 9-10, 19-21, 25-34, 35. 41-46, 47-49, 55-57, 58-68* is/are allowed.

6)☒ Claim(s) *38,39,50 and 52-54* is/are rejected.

7)☒ Claim(s) *40* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/12/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This is a response to the Applicant's filing on 12/20/05. In virtue of this filing, claims 3-5, 7, 9-10, 19-21, 25-34, 35, 38-40, 41-46, 47-49, 50, 52-53, 54, 55-57, 58-67 and 68 are currently presented in the instant applicant.

Inventorship

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim Objections

3. Claim 52-53 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 38-39, 50,52-54 are rejected under 35 U.S.C. 102(b) as being anticipated by Rensel et al (US 6, 474, 380).

Regarding claim 38, Rensel discloses a tire and monitoring device having dipole antenna comprising a mounting member (36) incorporated in the tire (16) and having a first and second retaining connection (54 and 54) that are at least partially curved in shape: a first antenna wire incorporated in the tire (16) and connected to said first retaining connection (50): a second antenna wire(52) incorporated in the tire(16) connected to the second retaining connection (54) and an electrical circuit carried (32, 34) by the mounting member(36) and in electrical communication with the first(50) and second wire (52). See figures 1 and 3, col.3, lines 60-67 to col6, lines 1-25.

Regarding claim 39, Rensel discloses a first mounting member wire (54) connected to the first antenna wire (50) and the electrical circuit(36, 34, 32) for placing the first antenna wire(50) into electrical communication with said electrical circuit and a second mounting member wire(54) connected to the second antenna wire(52) and electrical circuit for placing said the second antenna wire(52) into electrical communication with said electrical circuit(36, 34, 32). See figure 3.

Regarding claim 50, Rensel discloses an electronics component assembly in a tire, comprising: a mounting member (50) having the shape of a generally solid cylinder

and incorporated in the a tire(16), the mounting member(50) having a first retaining connection(36) that is a cylindrical cavity having an internal threads and a first antenna wire(50) incorporated in the tire, said first antenna wire having external threads that are engageable with the internal threads of said first retaining connection to connect said first antenna wire to said mounting member and an electrical circuit carried by the mounting member and in electrical communication with said the first antenna wire. See figures 1 and 3, col.3, lines 60-67 to col6, lines 1-25.

Regarding claims 52 and 54, Rensel discloses a first mounting member wire (50) connected to the first antenna wire and the electrical circuit (32, 34) for placing the first antenna wire into electrical communication with said the electrical circuit (36); a second retaining connection(36) provided by said mounting member as another cylindrical cavity having internal threads; a second antenna wire(52) incorporated into the tire, the second antenna wire(52) having external threads that are engageable with the internal threads of the second retaining connection to connect said second antenna wire to the mounting member and a second mounting member wire connected to the second antenna wire and the electrical circuit for placing said the second antenna wire into electrical communication with the electrical circuit. See figures 1 and 3, col.3, lines 60-67 to col6, lines 1-25.

Regarding claim 53, Rensel discloses a cover(38) that protects said the integrated circuit, said the first mounting member wire, and said the second mounting member wire. See figure 3.

Allowable Subject Matter

6. Claim 40 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 3, 9, 19, 25, 35, 38, 41, 47, 55, 58 and 68 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Prior art does not teach that, the mounting member includes a flat base and said electrical circuit-is attached to said base; the first retaining connection includes a first and third pair of fingers that are semi-circular in shape and that are attached to said base and engage said first antenna wire to connect the first antenna wire to the mounting member; and the second retaining connection includes a second and fourth pair of fingers that are semi-circular in shape and are attached to said base and engage the second antenna wire to connect the second antenna wire to the mounting member recited in dependent claim 40.

Prior art does not teach that, the electrical circuit carried by the mounting member and in communication with said first and second antenna wires; wherein said means for securing comprises a first and second retaining groove, the first antenna wire is at least partially retained by said the first retaining groove, and said the second antenna wire is at least partially retained by said the second retaining groove recited in independent claim 3,

Prior art does not teach that, for securing comprises a first and second antenna wire receiving aperture, wherein an end of the first antenna wire is hook-shaped and is received by said the first antenna receiving aperture, and wherein an end of said the second antenna wire is hook-shaped and is received by said the second antenna receiving aperture recited in independent claims 9 and 19.

Prior art does not teach that, the second communication connection configured for placing the second antenna wire into communication with the integrated circuit', wherein a length of said first antenna wire extending from the tip of said first antenna wire is connected to said mounting member at a location spaced from the outer edge of said mounting member recited in independent claim 25.

Prior art does not teach that, a first antenna wire having an end and a bend, the bend in the first antenna wire received by the first antenna wire receiving aperture, and the end of the first antenna wire extending from the first side of the printed circuit board through the first antenna wire receiving aperture and to the second side of the printed circuit board; a second antenna wire having an end and a bend, the bend of the second antenna wire received by the second antenna wire receiving aperture, and the end of the second antenna wire extending from the first side of the printed circuit board through the second antenna wire receiving aperture and to the second side of the printed circuit board; an integrated circuit carried by the mounting member in combination with all limitations recited in independent claim 35.

Prior art does not teach that, the electrical circuit carried by the mounting member and in electrical communication with the first antenna wire; wherein the

mounting member has a longitudinal axis; the first retaining connection includes a first angled portion that is defined by a wall of the mounting member and is angled towards the longitudinal axis of the mounting member, and wherein the first antenna wire is connected to said the mounting member through engagement with the first angled portion recited in independent claims 41 and 47.

Prior art does not teach that, wherein the mounting member is in the shape of a generally solid cylinder, the first retaining connection is a cylindrical cavity that has an annular recess, the second retaining connection is a cylindrical cavity that has an annual recess; the first antenna wire has an annular projection engageable with the annular recess of the first retaining connection; the second antenna wire has an annular projection engageable with the annular recess of the second retaining connection; the first retaining connection is urged around the first antenna wire to help connect the first antenna wire to the mounting member', and the second retaining connection is urged around the second antenna wire to help connect the second antenna wire to the mounting member recited in independent claim 55.

Prior art does not teach that, a first antenna wire incorporated in the tire and connected to the first retaining connection; a second antenna wire incorporated in the tire and connected to the second retaining connection; and an integrated circuit carried by the mounting member and in electrical communication with the first and second antenna wires; wherein said first antenna wire is gee from contact with said integrated circuit and wherein a length of said first antenna wire is connected to said mounting

member at a location spaced from the outer edge of said mounting member recited in independent claim 58.

Prior art does not teach that, shape with a solid central section and an axis, the mounting member has a flat portion on the solid central section, the mounting member includes a first retaining connection that has a first angled portion that is a portion of the wall of the mounting member that is angled towards the axis of the mounting member, the mounting member includes a second retaining connection that is a second angled portion that is a portion of the wall of the mounting member that is angled towards the axis of the mounting member; a first antenna wire incorporated in the tire, the first antenna wire is connected to the mounting member through engagement with the first angled portion of the first retaining connection; a second antenna wire incorporated in the tire, the second antenna wire is connected to the mounting member through engagement with the second angled portion of the second retaining connection; an integrated circuit mounted on the flat portion of the solid central section of the mounting member recited in independent claim 68.

The remaining dependent claims 4-5, 7, 10-11, 20-21, 2634, 42-46, 48-49, 59-67 are allowable for at least above reason.

Citation of relevant prior art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art Hamaya (U.S. Patent No. 5,960,844) discloses a monitoring condition

of a vehicle.

Prior art Balzer et al (U.S. Patent No. 6,462,650) discloses a tire module attachment mount.

Prior art Koch et al. (U.S. Patent No. 6,443,198) discloses a an active path to a patch and a tire.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 AM-2:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callahan Timothy can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TUYET VO
PRIMARY EXAMINER

Examiner

Minh A

Art Unit 2821

3/09/06